iFoundry

IFSYS-8004 USB Serial-IR Adapter
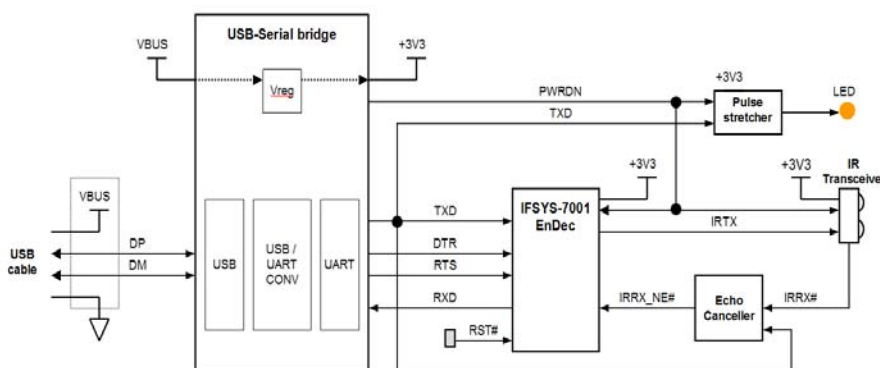
Product Brief

The IFSYS-8004 USB Serial-IR Adapter is intended for applications which need to transfer raw serial data wirelessly over a serial infrared link. It is ideal for OEMs, and equipment designers who do not wish to make significant changes to their legacy serial software, but who now require a wireless means of transferring data. IFSYS-8004 comes with a USB driver that appears as a virtual serial port in the host system, allowing existing legacy serial applications to work with little or no modification. IFSYS-8004 hardware simply encodes the serial data stream into IrDA^{TM} physical layer infrared pulses for transmission and demodulates incoming infrared pulses into serial UART data. Data between host and adapter is transferred over the USB link. The IFSYS-8004 USB Serial-IR Adapter allows equipment designers to work with raw serial data without having to worry about the intricacies of a higher level protocol.

Key features

- ☐ Converts "raw" serial data to infrared.

- ☐ Hardware is IrDA^{TM} V1.1 physical layer compliant, with a transmit range of 1m.

- ☐ USB low power device. Driver appears as a Microsoft Windows™ virtual COM port.

- ☐ Ideal for industrial and medical equipment and instrumentation applications.

IFSYS-8004 Block Architecture

Specifications subject to change

Rev. 1.25
10 July 2008

Infrared Data Association

IFSYS-8004 USB Serial-IR Adapter	**Product Brief**

SPECIFICATIONS

Features
- ☐ IrDA™ V1.1 compliant physical layer hardware, 1m transmit range
- ☐ Supports SIR communication speeds:
  - 9,600 bps
  - 19,200 bps
  - 57,600 bps
  - 115,200 bps

Operating System support
- ☐ Windows XP, XP Professional
- ☐ Windows 2000, 2000 Professional
- ☐ Windows Vista

Interface
- ☐ USB V1.1, compatible with USB V2.0 ports.

Electrical characteristics
- ☐ Temperature:
  - Operating: $0^{o}C$ to $+40^{o}C$
  - Storage: $-20^{o}C$ to $+70^{o}C$
- ☐ Average current consumption:
  - ~60mA (max.) (transmitting @ 115,200bps)
  - ~350uA (max.) (USB suspend mode).

Regulatory qualifications
- ☐ FCC
- ☐ CE
- ☐ Safety (EN60950)
- ☐ Others [*1]

Dimensions
- ☐ Casing (excluding cable): 49mm (W) x 63mm (L) x 34mm (H).
- ☐ Cable length: 1.5m
- ☐ Weight: ~120g

Ordering Information

Order Number	Order Description
IFSYS-8004A:3101	Bulk packed units in box of 120. Without CDs and Warranty cards.

[*1] iFoundry can provide assistance to equipment designer/manufacturer in certifying to other regulatory standards.

IrDA™ is a trademark of the Infrared Data Association.

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